

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 3, 4 and 9, and CANCEL claims 2 and 10 without prejudice or disclaimer in accordance with the following:

1. (currently amended) A communication system for controlling optical communication, the system comprising:

a sending unit including: supervisory signal sending control means for controlling the sending of a supervisory signal for having supervisory control of optical communication and a drive supervisory signal for controlling the driving of ~~an~~ a Raman optical fiber amplifier for performing Raman optical amplification by using a non-linear optical phenomenon in an optical fiber, and sending stop means for receiving a stop signal and for stopping the sending of the drive supervisory signal; and

a receiving unit including: the Raman optical fiber amplifier, drive control means for receiving the drive supervisory signal and for controlling the driving of the Raman optical fiber amplifier, and stop signal sending means for sending the stop signal to the sending unit after the Raman optical fiber amplifier being driven;

wherein the supervisory signal sending control means sets a transmission rate of the drive supervisory signal to a minimized value and sends the drive supervisory signal so that the drive supervisory signal can be received in a state in which the Raman optical fiber amplifier is not operating; and

a bit rate B_{OSC2} of the drive supervisory signal is given by

$$B_{OSC2} = B_{OSC1}/10^{(G_{DRA@OSC1}/10)}$$

where $10^A = 10^A$.

wherein B_{OSC1} is a bit rate of the supervisory signal and $G_{DRA@OSC1}$ is a gain of the Raman amplifier for the supervisory signal.

2. (cancelled)

3. (currently amended) The communication system according to claim ~~2~~1, wherein the supervisory signal sending control means includes a source of the supervisory signal and a source of the drive supervisory signal which are separate from each other and performs the

simultaneous or switching sending of the supervisory signal and the drive supervisory signal the transmission rates of which are different from each other.

4. (currently amended) The communication system according to claim 21, wherein the supervisory signal sending control means uses one signal source which can control a transmission rate variably to perform the switching sending of the supervisory signal and the drive supervisory signal the transmission rates of which are different from each other.

5. (original) The communication system according to claim 1, wherein the supervisory signal sending control means sets the wavelength of the drive supervisory signal to a value being within the range of an empty band in a transmission band for a main optical signal and sends the drive supervisory signal.

6. (original) The communication system according to claim 5, wherein the supervisory signal sending control means includes a source of the supervisory signal and a source of the drive supervisory signal which are separate from each other and performs the simultaneous or switching sending of the supervisory signal and the drive supervisory signal the wavelengths of which are different from each other.

7. (original) The communication system according to claim 5, wherein the supervisory signal sending control means uses one signal source which can control a wavelength variably to perform the switching sending of the supervisory signal and the drive supervisory signal the wavelengths of which are different from each other.

8. (original) The communication system according to claim 1, wherein the supervisory signal sending control means amplifies only the drive supervisory signal and sends the drive supervisory signal so that the drive supervisory signal can be received in a state in which the optical fiber amplifier is not operating.

9. (currently amended) A sending apparatus for controlling sending in optical communication, the apparatus comprising:

supervisory signal sending control means for controlling the sending of a supervisory signal for having supervisory control of optical communication and a drive supervisory signal for controlling the driving of ~~an~~ a Raman optical fiber amplifier for performing Raman optical amplification by using a non-linear optical phenomenon in an optical fiber; and

sending stop means for receiving a stop signal and for stopping the sending of the drive

supervisory signal;

wherein the supervisory signal sending control means sets a transmission rate of the drive supervisory signal to a minimized value and sends the drive supervisory signal so that the drive supervisory signal can be received in a state in which the Raman optical fiber amplifier is not operating; and

a bit rate B_{OSC2} of the drive supervisory signal is given by

$$B_{OSC2} = B_{OSC1} / 10^{(G_{DRA@OSC1} / 10)}$$

where $10^A = 10^A$.

wherein B_{OSC1} is a bit rate of the supervisory signal and $G_{DRA@OSC1}$ is a gain of the Raman amplifier for the supervisory signal.

10. (cancelled)